

Sequence Listing

<110> Mark S. Dennis

<120> Compounds that Bind HER2

<130> P1713R1

<141> 2000-06-30

<150> US 60/142,232

<151> 1999-07-02

<160> 162

<210> 1

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide sequence

<400> 1

Gln Arg Asn Glu Ala Trp Gly Cys Ile Gly Pro Gly Cys Glu Met
1 5 10 15

Leu Cys Ala Trp Cys
20

<210> 2

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide sequence

<400> 2

Leu Ser Pro Glu Thr Trp Gly Cys Ile Gly Pro Gly Cys Glu Met
1 5 10 15

Leu Cys Ser Trp Cys
20

<210> 3

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide sequence

<400> 3

Glu Asn Trp Glu Met Trp Gly Cys Ile Gly Pro Gly Cys Lys Phe
1 5 10 15

Leu Cys Glu Pro Cys
20

<210> 4
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
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<400> 4
Glu Val Trp Gly Cys Ile Gly Pro Gly Cys Lys Ala Leu Cys Asp
1 5 10 15

Trp Cys

<210> 5
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
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<400> 5
Glu Arg Trp Gly Cys Ile Gly Pro Gly Cys Arg Met Leu Cys Glu
1 5 10 15

Trp Cys

<210> 6
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
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<400> 6
Glu Val Trp Gly Cys Ile Gly Pro Gly Cys Asp Met Leu Cys Asn
1 5 10 15

Trp Cys

<210> 7
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
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<400> 7
Glu Val Trp Gly Cys Ile Gly Pro Gly Cys Ser Met Leu Cys Gly
1 5 10 15

Trp Cys

<210> 8
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> unsure
<222> 1-3, 5, 14, 18
<223> unknown amino acid

<400> 8
Xaa Xaa Xaa Glu Xaa Trp Gly Cys Ile Gly Pro Gly Cys Xaa Met
1 5 10 15
Leu Cys Xaa Trp Cys
20

<210> 9
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
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<400> 9
Ala Ser His Glu Val Trp Gly Cys Ile Gly Pro Gly Cys Lys Cys
1 5 10 15
Leu Gln Ala Cys Met
20

<210> 10
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
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<400> 10
Lys Leu Asn Glu Glu Trp Gly Cys Ile Gly Pro Gly Cys Ala Cys
1 5 10 15
Leu Leu Gln Cys Trp
20

<210> 11
<211> 20
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<220>
<223> synthetic peptide sequence

<220>
<221> unsure
<222> 18, 20
<223> unknown amino acid

<400> 11
Lys Leu Asn Glu Asp Trp Gly Cys Ile Gly Pro Gly Cys Ala Cys
1 5 10 15
Leu Leu Xaa Cys Xaa
20

<210> 12
<211> 20
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<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 12
Thr Gln Ala Glu Arg Trp Gly Cys Ile Gly Pro Gly Cys Glu Cys
1 5 10 15
Leu Met Ser Cys Val
20

<210> 13
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
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<400> 13
Ala Pro Arg Glu Val Trp Gly Cys Ile Gly Pro Gly Cys Ala Cys
1 5 10 15
Leu Leu Arg Cys Ile
20

<210> 14
<211> 20
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<213> Artificial Sequence

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<400> 14
Gln Val Tyr Glu Ser Trp Gly Cys Ile Gly Pro Gly Cys Ala Cys
1 5 10 15

Leu Gln Ala Cys Leu
20

<210> 15
<211> 20
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<400> 15
Arg Thr Glu Glu Gln Trp Gly Cys Ile Gly Pro Gly Cys Arg Cys
1 5 10 15

Leu Leu Ser Cys Leu
20

<210> 16
<211> 20
<212> PRT
<213> Artificial Sequence

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<400> 16
Phe Ala Gly Glu Ser Trp Gly Cys Ile Gly Pro Gly Cys Glu Cys
1 5 10 15

Leu Ile Gly Cys Leu
20

<210> 17
<211> 20
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<220>
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<400> 17
Thr Ala Arg Glu Val Trp Gly Cys Ile Gly Pro Gly Cys Asn Cys
1 5 10 15

Leu Leu Ala Cys Leu
20

<210> 18
<211> 20
<212> PRT
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<220>
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<400> 18
Arg Pro His Glu Pro Trp Gly Cys Ile Gly Pro Gly Cys Ser Cys
1 5 10 15
Leu Leu Ser Cys Ile
20

<210> 19
<211> 17
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<213> Artificial Sequence

<220>
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<400> 19
Glu Val Trp Gly Cys Ile Gly Pro Gly Cys Glu Cys Leu Met Asn
1 5 10 15
Cys Leu

<210> 20
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<400> 20
Glu Gly Trp Gly Cys Ile Gly Pro Gly Cys Glu Cys Leu Leu Arg
1 5 10 15
Cys Leu

<210> 21
<211> 17
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<400> 21
Glu Gly Trp Gly Cys Ile Gly Pro Gly Cys Gly Cys Leu Leu Lys
1 5 10 15
Cys Leu

<210> 22

<211> 17

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<220>

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<400> 22

Glu Pro Trp Gly Cys Ile Gly Pro Gly Cys Ala Cys Leu Leu Gly
1 5 10 15

Cys Leu

<210> 23

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide sequence

<400> 23

Glu Glu Trp Gly Cys Ile Gly Pro Gly Cys Ala Cys Leu Leu Asn
1 5 10 15

Cys Ile

<210> 24

<211> 17

<212> PRT

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<223> synthetic peptide sequence

<400> 24

Glu Gln Trp Gly Cys Ile Gly Pro Gly Cys Lys Cys Leu Met Gly
1 5 10 15

Cys Leu

<210> 25

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide sequence

<400> 25

Glu Gln Trp Gly Cys Ile Gly Pro Gly Cys Gly Cys Leu Leu Arg
1 5 10 15

Cys Leu

<210> 26
<211> 17
<212> PRT
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<400> 26
Glu Ala Trp Gly Cys Ile Gly Pro Gly Cys Gly Cys Leu Met Ala
1 5 10 15

Cys Leu

<210> 27
<211> 20
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<220>
<221> unsure
<222> 1-3, 5, 14, 18
<223> unknown amino acid

<400> 27
Xaa Xaa Xaa Glu Xaa Trp Gly Cys Ile Gly Pro Gly Cys Xaa Cys
1 5 10 15

Leu Leu Xaa Cys Leu
20

<210> 28
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
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<400> 28
Asn Val Cys Glu Phe Trp Gly Cys Ile Gly Pro Gly Cys Ala Gln
1 5 10 15

Leu Cys

<210> 29
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 29
Cys Ile Asp Glu Thr Trp Gly Cys Ile Gly Pro Gly Cys Glu Glu
1 5 10 15

Leu Arg Cys Lys Arg
20

<210> 30

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

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<400> 30

Tyr Glu Trp Glu Gly Trp Gly Cys Ile Gly Pro Gly Cys Pro Ala
1 5 10 15

Leu Gly Phe Gly Tyr
20

<210> 31

<211> 20

<212> PRT

<213> Artificial Sequence

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<223> synthetic peptide sequence

<400> 31

Arg Trp Asp Glu Glu Trp Gly Cys Ile Gly Pro Gly Cys Glu Trp
1 5 10 15

Leu Val Val Arg Lys
20

<210> 32

<211> 16

<212> PRT

<213> Artificial Sequence

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<400> 32

His Trp Met Glu Arg Trp Gly Cys Ile Gly Pro Gly Cys Gly Phe
1 5 10 15

Leu

<210> 33

<211> 16

<212> PRT

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<400> 33.
Asn Trp Pro Glu Gly Trp Gly Cys Ile Gly Pro Gly Cys Lys Leu
1 5 10 15
Leu

<210> 34
<211> 16
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<400> 34
Phe Asn Trp Glu Lys Trp Gly Cys Ile Gly Pro Gly Cys Arg Thr
1 5 10 15

Leu

<210> 35
<211> 16
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Phe Ser Gly Glu Arg Trp Gly Cys Ile Gly Pro Gly Cys Gln Val
1 5 10 15
Leu

<210> 36
<211> 16
<212> PRT
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<220>
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<400> 36
Gly Gly Trp Glu Gly Trp Gly Cys Ile Gly Pro Gly Cys Arg Tyr
1 5 10 15
Leu

<210> 37
<211> 16
<212> PRT
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<220>
<221> unsure
<222> 15
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<400> 37
Leu Trp Phe Glu Arg Trp Gly Cys Ile Gly Pro Gly Cys Thr Xaa
1 5 10 15

Leu

<210> 38
<211> 16
<212> PRT
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<400> 38
Gly Ile Pro Glu Gly Trp Gly Cys Ile Gly Pro Gly Cys Glu Trp
1 5 10 15

Leu

<210> 39
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
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<400> 39
Trp Trp Thr Glu Arg Trp Gly Cys Ile Gly Pro Gly Cys Ser Met
1 5 10 15

Leu

<210> 40
<211> 20
<212> PRT
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<220>
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<220>
<221> unsure
<222> 1, 3, 17-20
<223> unknown amino acid

<400> 40
Xaa Cys Xaa Glu Arg Trp Gly Cys Ile Gly Pro Gly Cys Ser Met
1 5 10 15

Leu Xaa Xaa Xaa Xaa
20

<210> 41
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 41
Leu Gly Trp Glu Arg Trp Gly Cys Ile Gly Pro Gly Cys Arg Ala
1 5 10 15

Leu

<210> 42
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 42
Ser Pro Trp Glu Gly Trp Gly Cys Ile Gly Pro Gly Cys Arg Trp
1 5 10 15

Leu

<210> 43
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
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<400> 43
Arg Gly Trp Glu Gly Trp Gly Cys Ile Gly Pro Gly Cys Ser Phe
1 5 10 15

Leu

<210> 44
<211> 20
<212> PRT
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<220>
<223> synthetic peptide sequence

<220>
<221> unsure
<222> 1-2, 5, 14-15, 17-20
<223> unknown amino acid

<400> 44
Xaa Xaa Trp Glu Xaa Trp Gly Cys Ile Gly Pro Gly Cys Xaa Xaa
1 5 10 15
Leu Xaa Xaa Xaa Xaa
20

<210> 45
<211> 27
<212> PRT
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<220>
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<400> 45
Cys Ser Trp Val Leu Val Gln Cys Gly Gly Glu Trp Trp His Cys
1 5 10 15
Cys Gly Leu Gly Cys Gly Leu Val Val Asn Ala Cys
20 25

<210> 46
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
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<400> 46
Cys Ala Trp Val Ser Phe Glu Cys Gly Gly Glu Val Trp His Cys
1 5 10 15
Cys Gly Leu Gly Cys Gly Trp Val Trp Lys Ala Cys
20 25

<210> 47
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 47
Cys Ala Trp Val Leu Val Gln Cys Gly Gly Glu Trp Trp His Cys
1 5 10 15

Cys Gly Pro Gly Cys Glu Phe Val Val Asp Ala Cys
20 25

<210> 48
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 48
Cys Ala Trp Val Ala Val Tyr Cys Gly Gly Glu Leu Trp His Cys
1 5 10 15

Cys Gly Pro Gly Cys Gly Phe Val Val Asp Ser Cys
20 25

<210> 49
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 49
Cys Ala Trp Val Arg Val Trp Cys Phe Gly Glu Trp Trp Asp Cys
1 5 10 15

Cys Gly Leu Gly Cys Gly Trp Val Val Asn Val Cys
20 25

<210> 50
<211> 27
<212> PRT
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<220>
<223> synthetic peptide sequence

<400> 50
Cys Ala Trp Val Arg Val Leu Cys Gly Gly Glu Trp Trp His Cys
1 5 10 15

Cys Gly Leu Gly Cys Gly Trp Val Val Glu Ala Cys
20 25

<210> 51
<211> 27
<212> PRT
<213> Artificial Sequence

<220>

<223> synthetic peptide sequence

<400> 51

Cys Ser Trp Val Ser Val Leu Cys Gly Gly Glu Trp Trp Gln Cys
1 5 10 15

Cys Gly Pro Gly Cys Gly Leu Val Val Asn Ala Cys
20 25

<210> 52

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide sequence

<400> 52

Cys Ser Trp Val Ser Leu Gln Cys Gly Gly Glu Trp Trp His Cys
1 5 10 15

Cys Gly Gly Gly Cys Gly Trp Val Val Asn Val Cys
20 25

<210> 53

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide sequence

<400> 53

Cys Ser Trp Val Leu Leu His Cys Gly Gly Glu Trp Trp His Cys
1 5 10 15

Cys Gly Gly Gly Cys Gly Trp Val Gly Glu Ala Cys
20 25

<210> 54

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide sequence

<400> 54

Cys Ser Trp Val Leu Leu Glu Cys Gly Gly Glu Leu Trp Glu Cys
1 5 10 15

Cys Gly Leu Gly Cys Gly Trp Val Ala Asp Ala Cys
20 25

<210> 55
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 55
Cys Ser Trp Val Val Phe Glu Cys Leu Gly Glu Ser Trp His Cys
1 5 10 15

Cys Gly Gly Gly Cys Gly Trp Val Val His Ala Cys
20 25

<210> 56
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 56
Cys Ala Trp Val Ser Val Glu Cys Gly Gly Glu Trp Trp His Cys
1 5 10 15

Cys Gly Pro Gly Cys Gly Trp Val Val Asp Ala Cys
20 25

<210> 57
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 57
Tyr Glu Val Glu Ala Trp Asp Cys Met Gly Pro Gly Cys Ala Asn
1 5 10 15

Leu Phe Glu Ala His
20

<210> 58
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
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<400> 58
Tyr Glu Phe Glu Gly Trp Asp Cys Met Gly Pro Gly Cys Ala Ser
1 5 10 15

Val Phe Gly Ala His
20

<210> 59
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 59
Tyr Glu Gly Glu Ser Trp Gly Cys Ile Gly Pro Gly Cys Ala Ser
1 5 10 15

Leu Phe Asp Ala His
20

<210> 60
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
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<400> 60
Tyr Glu Val Glu Val Trp Glu Cys Ile Gly Pro Gly Cys Gly Tyr
1 5 10 15

Leu Phe Gly Ala His
20

<210> 61
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 61
Tyr Glu Val Glu Gly Trp Gly Cys Met Gly Pro Gly Cys Ala Phe
1 5 10 15

Leu Leu Glu Ala His
20

<210> 62
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
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<400> 62
Tyr Ser Phe Glu Gly Trp Gly Cys Ile Gly Pro Gly Cys Ala Tyr
1 5 10 15

Leu Phe Glu Gly His
20

<210> 63
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
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<400> 63
Tyr Asp Phe Glu Gly Trp Gly Cys Ile Gly Pro Gly Cys Gly Asn
1 5 10 15

Leu Leu Glu Ala His
20

<210> 64
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
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<400> 64
Tyr Asp Phe Glu Gly Trp Asp Cys Thr Gly Pro Gly Cys Ala Tyr
1 5 10 15

Leu Phe Glu Gly His
20

<210> 65
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
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<400> 65
Asp Glu Val Glu Ser Trp Gly Cys Ile Gly Pro Gly Cys Ala Tyr
1 5 10 15

Leu Phe Gly Ala Leu
20

<210> 66
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 66
Ser Glu Val Glu Val Trp His Cys Ile Gly Pro Gly Cys Val Tyr
1 5 10 15

Leu Phe Glu Ala Tyr
20

<210> 67
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 67
Phe Glu Phe Glu Gly Trp Glu Cys Met Gly Pro Gly Cys Ala Glu
1 5 10 15

Leu Phe Ala Gly His
20

<210> 68
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 68
His Asp Val Glu Gly Trp Gly Cys Ile Gly Pro Gly Cys Ala Asp
1 5 10 15

Leu Phe Glu Ala Phe
20

<210> 69
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 69
Tyr Glu Phe Glu Gly Trp Gly Cys Ile Gly Pro Gly Cys Ala Tyr
1 5 10 15

Leu Phe Glu Ala His
20

<210> 70
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> Mutagen
<222> 2-7, 9-14, 17-19, 21-26
<223> More than one possible amino acid

<400> 70
Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys
1 5 10 15

Cys Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys
20 25

<210> 71
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<220>
<221> Mutagen
<222> 2
<223> Xaa can be Cys or Ile

<400> 71
Cys Xaa Gly Pro Gly Cys
1 5

<210> 72
<211> 218
<212> PRT
<213> Homo sapiens

<400> 72
Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro
1 5 10 15

Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
20 25 30

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys
35 40 45

Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
50 55 60

Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser
65 70 75

Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr
80 85 90

Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys
95 100 105

Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr
110 115 120

Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser
125 130 135

Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
140 145 150

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
155 160 165

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
170 175 180

Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser
185 190 195

Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
200 205 210

Ser Leu Ser Leu Ser Pro Gly Lys
215

<210> 73
<211> 218
<212> PRT
<213> Homo sapiens

<400> 73
Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro
1 5 10 15

Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
20 25 30

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys
35 40 45

Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
50 55 60

Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser
65 70 75

Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr
80 85 90

Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys
95 100 105

Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr
110 115 120
Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser
125 130 135
Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
140 145 150
Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
155 160 165
Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
170 175 180
Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser
185 190 195
Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
200 205 210
Ser Leu Ser Leu Ser Pro Gly Lys
215

<210> 74
<211> 217
<212> PRT
<213> Homo sapiens

<400> 74
Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro
1 5 10 15
Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr
20 25 30
Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe
35 40 45
Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
50 55 60
Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val
65 70 75
Leu Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys
80 85 90
Cys Lys Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr
95 100 105
Ile Ser Lys Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
110 115 120
Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu
125 130 135

Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu
 140 145 150
 Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
 155 160 165
 Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
 170 175 180
 Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
 185 190 195
 Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser
 200 205 210
 Leu Ser Leu Ser Pro Gly Lys
 215
 <210> 75
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 <213> Homo sapiens
 <400> 75
 Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro
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 Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
 20 25 30
 Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln
 35 40 45
 Phe Lys Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
 50 55 60
 Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser
 65 70 75
 Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr
 80 85 90
 Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys
 95 100 105
 Thr Ile Ser Lys Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr
 110 115 120
 Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser
 125 130 135
 Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
 140 145 150
 Glu Trp Glu Ser Ser Gly Gln Pro Glu Asn Asn Tyr Asn Thr Thr
 155 160 165

Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
 170 175 180
 Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Ile Phe Ser
 185 190 195
 Cys Ser Val Met His Glu Ala Leu His Asn Arg Phe Thr Gln Lys
 200 205 210
 Ser Leu Ser Leu Ser Pro Gly Lys
 215

<210> 76
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 <212> PRT
 <213> Homo sapiens

<400> 76
 Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe Leu Phe Pro
 1 5 10 15

Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
 20 25 30

Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val Gln
 35 40 45

Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
 50 55 60

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser
 65 70 75

Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr
 80 85 90

Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys
 95 100 105

Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr
 110 115 120

Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser
 125 130 135

Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
 140 145 150

Glu Trp Glx Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
 155 160 165

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Arg
 170 175 180

Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser
 185 190 195

Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
 200 205 210
 Ser Leu Ser Leu Ser Leu Gly Lys
 215
 <210> 77
 <211> 215
 <212> PRT
 <213> Mus musculus
 <400> 77
 Thr Val Pro Glu Val Ser Ser Val Phe Ile Phe Pro Pro Lys Pro
 1 5 10 15
 Lys Asp Val Leu Thr Ile Thr Leu Thr Pro Lys Val Thr Cys Val
 20 25 30
 Val Val Asp Ile Ser Lys Asp Asp Pro Glu Val Gln Phe Ser Trp
 35 40 45
 Phe Val Asp Asp Val Glu Val His Thr Ala Gln Thr Gln Pro Arg
 50 55 60
 Glu Glu Gln Phe Asn Ser Thr Phe Arg Ser Val Ser Glu Leu Pro
 65 70 75
 Ile Met His Gln Asp Cys Leu Asn Gly Lys Glu Phe Lys Cys Arg
 80 85 90
 Val Asn Ser Ala Ala Phe Pro Ala Pro Ile Glu Lys Thr Ile Ser
 95 100 105
 Lys Thr Lys Gly Arg Pro Lys Ala Pro Gln Val Tyr Thr Ile Pro
 110 115 120
 Pro Pro Lys Glu Gln Met Ala Lys Asp Lys Val Ser Leu Thr Cys
 125 130 135
 Met Ile Thr Asp Phe Phe Pro Glu Asp Ile Thr Val Glu Trp Gln
 140 145 150
 Trp Asn Gly Gln Pro Ala Glu Asn Tyr Lys Asn Thr Gln Pro Ile
 155 160 165
 Met Asp Thr Asp Gly Ser Tyr Phe Val Tyr Ser Lys Leu Asn Val
 170 175 180
 Gln Lys Ser Asn Trp Glu Ala Gly Asn Thr Phe Thr Cys Ser Val
 185 190 195
 Leu His Glu Gly Leu His Asn His His Thr Glu Lys Ser Leu Ser
 200 205 210
 His Ser Pro Gly Lys
 215

<210> 78
<211> 218
<212> PRT
<213> Mus musculus

<400> 78
Pro Ala Pro Asn Leu Leu Gly Gly Pro Ser Val Phe Ile Phe Pro
1 5 10 15
Pro Lys Ile Lys Asp Val Leu Met Ile Ser Leu Ser Pro Ile Val
20 25 30
Thr Cys Val Val Val Asp Val Ser Glu Asp Asp Pro Asp Val Gln
35 40 45
Ile Ser Trp Phe Val Asn Asn Val Glu Val His Thr Ala Gln Thr
50 55 60
Gln Thr His Arg Glu Asp Tyr Asn Ser Thr Leu Arg Val Val Ser
65 70 75
Ala Leu Pro Ile Gln His Gln Asp Trp Met Ser Gly Lys Glu Phe
80 85 90
Lys Cys Lys Val Asn Asn Lys Asp Leu Pro Ala Pro Ile Glu Arg
95 100 105
Thr Ile Ser Lys Pro Lys Gly Ser Val Arg Ala Pro Gln Val Tyr
110 115 120
Val Leu Pro Pro Pro Glu Glu Glu Met Thr Lys Lys Gln Val Thr
125 130 135
Leu Thr Cys Met Val Thr Asp Phe Met Pro Glu Asp Ile Tyr Val
140 145 150
Glu Trp Thr Asn Asn Gly Lys Thr Glu Leu Asn Tyr Lys Asn Thr
155 160 165
Glu Pro Val Leu Asp Ser Asp Gly Ser Tyr Phe Met Tyr Ser Lys
170 175 180
Leu Arg Val Glu Lys Lys Asn Trp Val Glu Arg Asn Ser Tyr Ser
185 190 195
Cys Ser Val Val His Glu Gly Leu His Asn His His Thr Thr Lys
200 205 210
Ser Phe Ser Arg Thr Pro Gly Lys
215

<210> 79
<211> 218
<212> PRT
<213> Mus musculus

<400> 79

Pro	Ala	Pro	Asn	Leu	Glu	Gly	Gly	Pro	Ser	Val	Phe	Ile	Phe	Pro
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		20							25					30
Thr	Cys	Val	Val	Val	Asp	Val	Ser	Glu	Asp	Asp	Pro	Asp	Val	Gln
		35						40						45
Ile	Ser	Trp	Phe	Val	Asn	Asn	Val	Glu	Val	His	Thr	Ala	Gln	Thr
			50					55						60
Gln	Thr	His	Arg	Glu	Asp	Tyr	Asn	Ser	Thr	Ile	Arg	Val	Val	Ser
		65						70						75
His	Leu	Pro	Ile	Gln	His	Gln	Asp	Trp	Met	Ser	Gly	Lys	Glu	Phe
		80						85						90
Lys	Cys	Lys	Val	Asn	Asn	Lys	Asp	Leu	Pro	Ser	Pro	Ile	Glu	Arg
		95						100						105
Thr	Ile	Ser	Lys	Pro	Lys	Gly	Leu	Val	Arg	Ala	Pro	Gln	Val	Tyr
			110					115						120
Thr	Leu	Pro	Pro	Pro	Ala	Glu	Gln	Leu	Ser	Arg	Lys	Asp	Val	Ser
		125						130						135
Leu	Thr	Cys	Leu	Val	Val	Gly	Phe	Asn	Pro	Gly	Asp	Ile	Ser	Val
		140						145						150
Glu	Trp	Thr	Ser	Asn	Gly	His	Thr	Glu	Glu	Asn	Tyr	Lys	Asp	Thr
		155						160						165
Ala	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Tyr	Phe	Ile	Tyr	Ser	Lys
		170						175						180
Leu	Asn	Met	Lys	Thr	Ser	Lys	Trp	Glu	Lys	Thr	Asp	Ser	Phe	Ser
		185						190						195
Cys	Asn	Val	Arg	His	Glu	Gly	Leu	Lys	Asn	Tyr	Tyr	Leu	Lys	Lys
		200						205						210
Thr	Ile	Ser	Arg	Ser	Pro	Gly	Lys							
		215												

<210> 80

<211> 218

<212> PRT

<213> Mus musculus

<400> 80

Pro	Pro	Gly	Asn	Ile	Leu	Gly	Gly	Pro	Ser	Val	Phe	Ile	Phe	Pro
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Pro	Lys	Pro	Lys	Asp	Ala	Leu	Met	Ile	Ser	Leu	Thr	Pro	Lys	Val
				20					25					30

Thr Cys Val Val Val Asp Val Ser Glu Asp Asp Pro Asp Val His
35 40 45

Val Ser Trp Phe Val Asp Asn Lys Glu Val His Thr Ala Trp Thr
50 55 60

Gln Pro Arg Glu Ala Gln Tyr Asn Ser Thr Phe Arg Val Val Ser
65 70 75

Ala Leu Pro Ile Gln His Gln Asp Trp Met Arg Gly Lys Glu Phe
80 85 90

Lys Cys Lys Val Asn Asn Lys Ala Leu Pro Ala Pro Ile Glu Arg
95 100 105

Thr Ile Ser Lys Pro Lys Gly Arg Ala Gln Thr Pro Gln Val Tyr
110 115 120

Thr Ile Pro Pro Pro Arg Glu Gln Met Ser Lys Lys Lys Val Ser
125 130 135

Leu Thr Cys Leu Val Thr Asn Phe Phe Ser Glu Ala Ile Ser Val
140 145 150

Glu Trp Glu Arg Asn Gly Glu Leu Glu Gln Asp Tyr Lys Asn Thr
155 160 165

Pro Pro Ile Leu Asp Ser Asp Gly Thr Tyr Phe Leu Tyr Ser Lys
170 175 180

Leu Thr Val Asp Thr Asp Ser Trp Leu Gln Gly Glu Ile Phe Thr
185 190 195

Cys Ser Val Val His Glu Ala Leu His Asn His His Thr Gln Lys
200 205 210

Asn Leu Ser Arg Ser Pro Gly Lys
215

<210> 81

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide sequence

<400> 81

Gln Val Tyr Glu Ser Trp Gly Cys Ile Gly Pro Gly Cys Ala Cys
1 5 10 15

Leu Gln Ala Cys Leu
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<210> 82

<211> 46

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide sequence

<400> 82

Gln Val Tyr Glu Ser Trp Gly Cys Ile Gly Pro Gly Cys Ala Cys
1 5 10 15

Leu Gln Ala Cys Leu Gly Gly Ser Gly Gly Gln Val Tyr Glu
20 25 30

Ser Trp Gly Cys Ile Gly Pro Gly Cys Ala Cys Leu Gln Ala Cys
35 40 45

Leu

<210> 83

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide sequence

<400> 83

Cys Ala Trp Val Ser Val Glu Cys Gly Gly Glu Trp Trp His Cys
1 5 10 15

Cys Gly Pro Gly Cys Gly Trp Val Val Asp Ala Cys
20 25

<210> 84

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide sequence

<400> 84

Tyr Ser Phe Glu Gly Trp Gly Cys Ile Gly Pro Gly Cys Ala Tyr
1 5 10 15

Leu Phe Glu Gly His
20

<210> 85

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide sequence

<400> 85

Tyr Glu Trp Glu Gly Trp Gly Cys Ile Gly Pro Gly Cys Pro Ala
1 5 10 15

Leu Gly Phe Gly Tyr
20

<210> 86
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
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<400> 86
Gln Arg Asn Glu Ala Trp Gly Cys Ile Gly Pro Gly Cys Glu Met
1 5 10 15

Leu Cys Ala Trp Cys
20

<210> 87
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 87
Thr Gln Ala Glu Arg Trp Gly Cys Ile Gly Pro Gly Cys Glu Cys
1 5 10 15

Leu Met Ser Cys Val
20

<210> 88
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 88
Cys Ile Asp Glu Thr Trp Gly Cys Ile Gly Pro Gly Cys Glu Glu
1 5 10 15

Leu Arg Cys Lys Arg
20

<210> 89
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 89
Asn Val Cys Glu Phe Trp Gly Cys Ile Gly Pro Gly Cys Ala Gln
1 5 10 15

Leu Cys

<210> 90
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> Mutagen
<222> 1-14, 16, 21-27
<223> More than one possible amino acid

<400> 90
Xaa Cys
1 5 10 15
Xaa Gly Pro Gly Cys Xaa Xaa Xaa Xaa Xaa Xaa
20 25

<210> 91
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<220>
<221> Mutagen
<222> 1-3, 5, 14-15, 17-20
<223> More than one possible amino acid

<400> 91
Xaa Xaa Xaa Glu Xaa Trp Gly Cys Ile Gly Pro Gly Cys Xaa Xaa
1 5 10 15
Leu Xaa Xaa Xaa Xaa
20

<210> 92
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<220>
<221> Mutagen
<222> 1-7, 9, 14-20
<223> More than one possible amino acid

<400> 92

Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Gly Pro Gly Cys Xaa Xaa
1 5 10 15

Xaa Xaa Xaa Xaa Xaa
20

<210> 93
<211> 20
<212> PRT
<213> Artificial Sequence

<220>

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<220>

<221> Mutagen

<222> 1-5, 7, 9, 14-20

<223> More than one possible amino acid

<400> 93

Xaa Xaa Xaa Xaa Xaa Trp Xaa Cys Xaa Gly Pro Gly Cys Xaa Xaa
1 5 10 15

Xaa Xaa Xaa Xaa Xaa
20

<210> 94
<211> 4
<212> PRT
<213> Artificial Sequence

<220>

<223> synthetic peptide sequence

<400> 94

Phe Gly Ala His
1

<210> 95

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide sequence

<400> 95

Phe Asp Ala His
1

<210> 96
<211> 4
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<213> Artificial Sequence

<220>
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<400> 96
Leu Glu Ala His
1

<210> 97
<211> 4
<212> PRT
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<220>
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<400> 97
Phe Glu Gly His
1

<210> 98
<211> 4
<212> PRT
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<220>
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<400> 98
Phe Gly Ala Leu
1

<210> 99
<211> 4
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<220>
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<400> 99
Phe Glu Ala Tyr
1

<210> 100
<211> 4
<212> PRT
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<220>
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<400> 100
Phe Ala Gly His
1

<210> 101
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
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<400> 101
Phe Glu Ala Phe
1

<210> 102
<211> 4
<212> PRT
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<220>
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<400> 102
Gln Ala Cys Met
1

<210> 103
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
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<400> 103
Leu Gln Cys Trp
1

<210> 104
<211> 4
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<220>
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<400> 104
Met Ser Cys Val
1

<210> 105
<211> 4
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<220>
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<400> 105
Leu Arg Cys Ile
1

<210> 106
<211> 4
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<400> 106
Gln Ala Cys Leu
1

<210> 107
<211> 4
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<400> 107
Leu Ser Cys Leu
1

<210> 108
<211> 4
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<220>
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<400> 108
Ile Gly Cys Leu
1

<210> 109
<211> 4
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<220>
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<400> 109
Leu Ala Cys Leu
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<210> 110
<211> 4
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<400> 110
Leu Ser Cys Ile
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<210> 111
<211> 4
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<220>
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<400> 111
Met Asn Cys Leu
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<210> 112
<211> 4
<212> PRT
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<220>
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<400> 112
Leu Arg Cys Leu
1

<210> 113
<211> 4
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<220>
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<400> 113
Leu Lys Cys Leu
1

<210> 114
<211> 4
<212> PRT
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<220>
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<400> 114
Leu Gly Cys Leu
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<210> 115
<211> 4
<212> PRT
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<220>
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<400> 115
Leu Asn Cys Ile
1

<210> 116
<211> 4
<212> PRT
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<220>
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<400> 116
Met Gly Cys Leu
1

<210> 117
<211> 4
<212> PRT
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<220>
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<400> 117
Met Ala Cys Leu
1

<210> 118
<211> 4
<212> PRT
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<220>
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<400> 118
Cys Ala Trp Cys
1

<210> 119
<211> 4
<212> PRT
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<220>
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<400> 119
Cys Ser Trp Cys
1

<210> 120
<211> 4
<212> PRT
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<220>
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<400> 120
Cys Glu Pro Cys
1

<210> 121
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
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<400> 121
Cys Asp Trp Cys
1

<210> 122
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 122
Cys Glu Trp Cys
1

<210> 123
<211> 4
<212> PRT
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<220>
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<400> 123
Cys Asn Trp Cys
1

<210> 124
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 124
Cys Gly Trp Cys
1

<210> 125
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<220>
<221> Mutagen
<222> 2-7, 9-14, 17-19, 21-26
<223> More than one possible amino acid

<400> 125
Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys
1 5 10 15

Cys Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys
20 25

<210> 126
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<220>
<221> Mutagen
<222> 1-10, 12, 14, 21-27
<223> More than one possible amino acid

<400> 126
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Glu Xaa Trp Xaa Cys
1 5 10 15

Cys Gly Pro Gly Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa
20 25

<210> 127
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> Mutagen
<222> 2, 5-7, 9
<223> More than one possible amino acid

<400> 127
Cys Xaa Trp Val Xaa Xaa Xaa Cys Xaa Gly
1 5 10

<210> 128
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<220>
<221> Mutagen
<222> 6-7
<223> More than one possible amino acid

<400> 128
Cys Ala Trp Val Leu Xaa Xaa Cys Gly Gly
1 5 10

<210> 129
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 129
Gly Gly Gly Ser Gly Gly
1 5

<210> 130
<211> 6
<212> PRT
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<220>
<223> synthetic peptide sequence

<400> 130
Gly Gly Gly Ser Ser Gly
1 5

<210> 131
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 131
Gly Gly Gly Arg Gly Gly
1 5

<210> 132
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
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<400> 132
Tyr Glu Val Glu Ala Trp Asp Cys Met Gly Pro Gly Cys Ala Asn
1 5 10 15

Leu Phe Glu Ala His
20

<210> 133
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 133
Ser Ser Glu Cys Ala Cys Asp Lys Gly Gly Arg Arg Val Leu Cys
1 5 10 15

Ile Asn Lys Val Gly
20

<210> 134
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 134
Glu Pro His Gly Cys Ser Leu Trp Asp Trp Glu Leu Arg Thr Cys
1 5 10 15

Ser Glu Tyr Ala Asn
20

<210> 135
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 135
Lys Glu Arg Pro Cys Ala Gly Asp Ala Pro Arg Lys Gly Val Cys
1 5 10 15

His Val Ala Thr His
20

<210> 136
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 136
Lys Val Arg Ser Cys Ile Glu Glu Ser Leu Asp Thr Arg Arg Cys
1 5 10 15

Tyr Leu Val Val Glu
20

<210> 137
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 137
Ala Lys Thr Ser Ser Cys Gly Glu His Glu Glu Arg Arg Ala Val
1 5 10 15

Cys Val Leu Ser Arg
20

<210> 138
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
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<400> 138
Lys Val Trp Ser Val Gln Ser Pro
1 5

<210> 139
<211> 8
<212> PRT
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<220>
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<400> 139
Gly Lys Val Gln Arg Cys Ile Pro
1 5

<210> 140
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
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<400> 140
Gln Thr Cys Arg Arg Val Leu Cys Leu Pro
1 5 10

<210> 141
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 141
Arg Val Trp Thr Trp Arg Trp Asn
1 5

<210> 142
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
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<400> 142
Arg Ile Cys Thr Thr Pro Cys Ala Val
1 5

<210> 143
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 143
Thr Ser Cys Arg Arg Val Phe Cys Ala Val
1 5 10

<210> 144
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 144
Arg Val Cys Thr Gly Cys Val Thr
1 5

<210> 145
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 145
Lys Val Cys Thr Arg Val Cys Cys Gly Thr
1 5 10

<210> 146
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 146
His Pro Cys His Met Arg Val Leu Cys Ala Ala
1 5 10

<210> 147
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 147
Arg Gly Cys Lys Ala Thr Gly Lys Val Leu Cys Ser Leu
1 5 10

<210> 148
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 148
Ser Gly Cys Leu Arg Ala Val Gly Ala Cys Asn Thr
1 5 10

<210> 149
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 149
Ala Gly Cys Gly Ser Lys Ala Val Cys Val Ser
1 5 10

<210> 150
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 150
Arg Val Trp Thr Ala Pro Gln Cys Leu Ile
1 5 10

<210> 151
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
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<400> 151
Lys Val Cys His Ala Ser Ser Gly Cys Val Ala
1 5 10

<210> 152
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 152
Arg Ala Cys Gln Arg Ala Cys Leu Cys Pro Ala
1 5 10

<210> 153
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
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<400> 153
Arg Ser Cys Ala Asp Val Ala Ser Arg Cys Trp Glu His Cys Ile
1 5 10 15

Thr

<210> 154
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 154
Thr Asp Cys Gly Arg Val Ala Ser Val Cys Trp Glu Ser Cys Leu
1 5 10 15

Ile

<210> 155
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 155
Cys Cys Glu Thr Arg Trp Trp Cys Gln Trp Gly Phe Cys Ser Gly
1 5 10 15

Ser Ala Cys Cys

<210> 156
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 156
Gly Cys Lys Arg Val Cys Ser Leu Gly Val Met Cys
1 5 10

<210> 157
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 157
Cys Ser Trp Val Leu Val Gln Cys Gly Gly Glu Trp Trp His Cys
1 5 10 15

Cys Gly Leu Gly Cys Gly Leu Val Val Asn Ala Cys
20 25

<210> 158
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide sequence

<400> 158
Cys Gly Cys Glu Glu Arg Lys Ala Trp Lys Cys Gln Glu Ala Cys
1 5 10 15

Ala Arg Ser Gly Thr Val
20

<210> 159
<211> 84
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide

<400> 159
cgcgcccagg tgtacgagtc ctggggatgc atcgcccccg gctgcgcctg 50
cctgcaggcc tgcctggag gcgggagctc cggc 84

<210> 160
<211> 80
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide

<400> 160
gccggagctc ccgcctccca ggcaggcctg caggcaggcg cagccggggc 50
cgatgcatcc ccaggaactcg tacacctggg 80

<210> 161
<211> 20
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